

I  
Univ. of Ill. Library

University of Illinois  
Library at  
Urbana-Champaign  
Oak St.  
Unclassified

# International Ocean Telegraph Co.,

OFFICE

No. 45 WILLIAM STREET,

NEW YORK.

LIBRARY  
OF THE  
UNIVERSITY OF ILLINOIS



INTERNATIONAL  
**Ocean Telegraph Company** .

FROM THE

UNITED STATES

TO THE

ISLAND OF CUBA

AND OTHER

WEST INDIA ISLANDS,

PANAMA AND SOUTH AMERICA.

---

OFFICE, No. 45 WILLIAM STREET, NEW YORK.

---

NEW YORK:

D. VAN NOSTRAND, PUBLISHER, 192 BROADWAY.

1866.

LIBRARY  
OF THE  
UNIVERSITY OF ILLINOIS



•

THE

UNIVERSITY

OF

•

THE

LIBRARY

OF THE UNIVERSITY OF CHICAGO

1881

INTERNATIONAL  
OCEAN TELEGRAPH COMPANY.

---

PRESIDENT.

WILLIAM F. SMITH,  
*Late Major-General and Corps Engineers U. S. A.*

VICE-PRESIDENT.

ALEXANDER HAMILTON, JR.

SECRETARY.

ALFRED PELL, JR.

TREASURER.

MATURIN L. DELAFIELD.

DIRECTORS.

ALEXANDER HAMILTON, JR.,	CAMBRIDGE LIVINGSTON,
CHARLES KNAP,	WILLIAM T. BLODGETT,
WILLIAM F. SMITH,	EDWARD M. ARCHIBALD,
MATURIN L. DELAFIELD,	OLIVER K. KING,
JAMES A. SCRYMSER,	ALFRED PELL, JR.

COUNSEL.

ALEXANDER HAMILTON, JR., ESQ., SAMUEL E. LYON, ESQ.

---

CAPITAL - - - - - \$1,500,000

15,000 SHARES, \$100 EACH.

973062

General's Aug 37 Howard Mem Feb





# PROSPECTUS.

---

THE "INTERNATIONAL OCEAN TELEGRAPH COMPANY" is chartered under the laws of the State of New York, for the purpose of connecting, by means of telegraphic wires and cables, the United States with the island of Cuba, and other West India islands, and with the State of Panama and the Spanish main.

The Company have obtained from the Legislature of Florida, an act, dated January 2, 1866, giving to them, their associates, successors, and assigns, the sole and exclusive right and privilege for twenty years to connect by means of submarine telegraphic cables the shores and dependencies of the State of Florida with the island of Cuba and other West India islands, as well as the privilege of constructing land lines throughout any part of the state.

They have also obtained an act of Congress approved May 5, 1866, giving to them the sole privilege for fourteen years to lay and maintain telegraphic cables between the United States, from the shores of Florida, and the island of Cuba, the Bahamas and other West India islands.

They have also obtained from the government of

Spain, a concession by Royal Order, dated June 19, 1866, to land the cables of the Company on the island of Cuba, and to connect with the central telegraphic station in Havana, on the most favorable terms.

The Company have also made an agreement on highly favorable terms with the consolidated Telegraph Companies of the United States, to forward their messages wherever their lines extend.

It can hardly be necessary to enlarge upon the great and increasing commercial relations of the island of Cuba with the United States, which alone, it is supposed, will give such an amount of business to the telegraphic lines of the Company as will yield a very great return upon the capital invested in it; but, in addition to this source, the communication between Cuba and Spain and the rest of Europe, through the European ocean cables, and lines of steamers from New York, will add very materially to the business of the Company. In an official letter from the Spanish Director General of Telegraphs to his Government, he says that "the commerce between the two countries, as shown by official statistics, needs the transmission of over one thousand messages daily." This is confirmed by experienced persons; but is in excess of the estimates made by the Company, who will be amply satisfied and abundantly repaid by less than half this number of messages.

The Company propose before March, 1867, to construct the line between the United States and Cuba,



and subsequently to extend their lines to Panama, and to such of the West India islands as may offer sufficient inducements. For these purposes they have already dispatched an agent and are in communication with several foreign governments.

The entire length of the cable between Cuba and the United States will be one hundred and two miles, and English cable manufacturers have offered to make, lay, and guarantee the cable at reasonable rates. A French company has been heavily subsidized to lay telegraph cables from Lisbon westward, under the sanction of an international telegraphic convention, at which France, Portugal, Italy, Brazil, and other powers were represented. At this convention the object proposed was the connection by telegraphic lines of Europe, South America, the West India islands, and the United States; the neutrality of the line was agreed to, and exclusive privileges granted, by the powers represented, for a period of ninety-nine years. This line once constructed gives a cable, between Europe and America, of twenty-two sections, thus increasing the capacity for work and diminishing the risk of loss.

The Articles of Association, the act of the Legislature of Florida, the act of the Congress of the United States, and the several orders of the Spanish government above referred to are hereto annexed, and also extracts from letters, giving details as to the character of the bottom of the ocean between Florida and Cuba.

Further information may be obtained at the office of the Company, 45 William street, New York, where the subscription books are open, and specimens of the cable can be seen.

## APPENDIX.

---

### ARTICLES OF ASSOCIATION,

BETWEEN James A. Scrymser, Alfred Pell, Jr., Alexander Hamilton, Jr., Oliver K. King, all of the city, county, and State of New York, Maturin L. Delafield, of Yonkers, New York, William F. Smith, of Vermont, and James M. Digges, of Warrentown, Virginia.

We, the said James A. Scrymser, Alfred Pell, Jr., Alexander Hamilton, Jr., Oliver K. King, Maturin L. Delafield, William F. Smith, and James M. Digges, do hereby certify, That we have associated under the name of THE INTERNATIONAL OCEAN TELEGRAPH COMPANY, which name shall be used in its dealings by our said Company, and by which it may sue and be sued.

The object of said Company is to construct, use, and maintain a line or lines of magnetic or electric telegraph between the city of New York and the city of Havana, in the island of Cuba.

Said line to cross the Gulf of Mexico at a convenient point at or near the southern extremity of the State of Florida, and thence to said city of New York.

Said line subsequently to be extended from the island of Cuba to the isthmus of Panama, the Spanish Main, and the island of St. Thomas.

It is hereby expressly provided that at any future time the number of persons composing this Association, as well as the capital thereof, may be increased upon the consent of a majority of the directors thereof.



The duration of this Company shall be Fifty Years, beginning on the second day of December, one thousand eight hundred and sixty-five, and terminating on the second day of December, one thousand nine hundred and fifteen.

In witness whereof, we have hereunto set our hands and seals this second day of December, one thousand eight hundred and sixty-five.

(Signed) JAMES A. SCRYMSER.

ALFRED PELL, Jr.

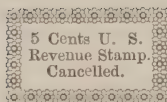
ALEX. HAMILTON, Jr.

OLIVER K. KING.

MAT'N L. DELAFIELD.

WM. F. SMITH,

J. M. DIGGES.



In the presence of—

DAVID LYON.

STATE OF NEW YORK, }  
City and County of New York. } ss.

I, WILLIAM C. CONNER, clerk of the said city and county, do certify, that I have compared the preceding with the original articles of association of the "INTERNATIONAL OCEAN TELEGRAPH COMPANY" on file in my office, and that the same is a correct transcript therefrom, and of the whole of such original.

In witness whereof, I have hereunto subscribed my name, and affixed my official seal, this 15th day of December, 1865.



WM. C. CONNER,

Clerk.

**An Act** to encourage Telegraphic Communication between the State of Florida and the Island of Cuba and other West India Islands.

**Whereas** JAMES A. SCRYMSER, ALFRED PELL, Jr., ALEXANDER HAMILTON, Jr., OLIVER K. KING, MATURIN L. DELAFIELD, WILLIAM F. SMITH, and JAMES M. DIGGES, their associates, successors, and assigns, persons composing "THE INTERNATIONAL OCEAN TELEGRAPH COMPANY," an incorporated Company, chartered by the State of New York, are desirous of establishing a line of submarine telegraphic communication between the State of Florida and the island of Cuba, Isthmus of Panama, Mexico, Central and South America ;

**Now therefore** in order to facilitate the said enterprise,

**Be it enacted** by the Senate and House of Representatives of the State of Florida, in General Assembly convened :

That JAMES A. SCRYMSER, ALFRED PELL, Jr., ALEXANDER HAMILTON, Jr., OLIVER K. KING, MATURIN L. DELAFIELD, WILLIAM F. SMITH, and JAMES M. DIGGES, persons composing "THE INTERNATIONAL OCEAN TELEGRAPH COMPANY," their associates, successors, and assigns, shall have the sole and exclusive right and privilege for the period of twenty years from the date of this act, of landing a submarine telegraphic cable or cables on the shore, sea-coast, islands, reefs or

sand-banks lying within the limits and jurisdiction of the State of Florida, and of connecting by means of said submarine telegraphic cable or cables the shore and sea-coast of the state aforesaid, with the island of Cuba.

**Be it further enacted,** That the parties aforesaid, composing "THE INTERNATIONAL OCEAN TELEGRAPH COMPANY," their associates, successors, and assigns, be authorized and empowered to connect the terminus of the submarine cable or cables aforesaid, on the shore, by a land line with the most convenient land telegraphic line, and for that purpose they shall have the privilege and power to erect, construct, maintain and operate telegraphic lines through the State of Florida, and across the islands, keys, sand-banks, and reefs, belonging to said State, and over which said State has control and jurisdiction.

**Provided, however,** That the said JAMES A. SCRYMSEER, ALFRED PELL, Jr., ALEXANDER HAMILTON, Jr., OLIVER K. KING, MATURIN L. DELAFIELD, WILLIAM F. SMITH, and JAMES M. DIGGES, parties composing the said "INTERNATIONAL OCEAN TELEGRAPH COMPANY," their associates, successors and assigns, shall within the period of five years from the passage of this act cause the said submarine telegraph cable or cables to be laid down, connecting the shore of the State of Florida and the island of Cuba, and, through the said State of Florida, connecting with other telegraph lines; and *Provided also,* That the said line shall be in successful operation for the transmission of



messages and despatches over it within the said period of five years, otherwise this grant to be null and void.

**Be it further enacted,** That the telegraph line from the terminus of the cable on the shore, shall connect with all telegraph lines which it may pass in the State of Florida, provided the consent of said telegraph companies can be obtained for that purpose.

**Be it further enacted,** That the State of Florida shall have the right to levy and collect taxes on the property of the said "INTERNATIONAL OCEAN TELEGRAPH COMPANY" in the State aforesaid.

Passed the Senate, January 2, 1866.

(Signed) F. S. VILLEPIGUE,  
*Secretary of State.*

(Signed) W. W. J. KELLY,  
*Lieutenant-Governor and ex-officio President  
of the Senate.*

Passed the House of Representatives, January 2, 1866.

(Signed) WM. FORSYTHE BYNUM,  
*Clerk of the House of Representatives.*

(Signed) JOSEPH JOHN WILLIAMS,  
*Speaker of the House of Representatives.*

Approved, January 2, 1866.



(Signed) DAVID S. WALKER,  
*Governor of the State of Florida.*

*January 2, 1866.*

OFFICE OF THE SECRETARY OF STATE  
OF THE STATE OF FLORIDA.

I hereby certify that the foregoing act of the General Assembly is a true copy of the original now on file in my office.

(Signed) . BENJ. F. ALLEN,

*Secretary of State.*

AN ACT to encourage telegraphic communication between the United States and the island of Cuba and other West India islands and the Bahamas.

WHEREAS James A. Scrymser, Alfred Pell, Junior, Alexander Hamilton, Junior, Oliver K. King, Maturin L. Delafield, William F. Smith, and James M. Digges, their associates, successors, and assigns, persons composing the International Ocean Telegraph Company, an incorporated company chartered by the State of New York, are desirous of establishing a line of submarine telegraphic communication between the United States of America and the West India islands and the Bahamas: Now therefore, in order to facilitate the said enterprise,

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled,* That the said International Ocean Telegraph Company, incorporated under the laws of the State of New York, their successors and assigns, shall have the sole privilege for a period of fourteen years from the approval of this act, to lay, construct, land, maintain, and operate telegraphic or magnetic lines or cables in and over the waters, reefs, islands, shores, and lands, over which the United States have jurisdiction, from the shores of the State of Florida, in the said United States, to the island of Cuba and the Bahamas, either or both, and other West India islands.



SEC. 2. *And be it further enacted*, That the said International Ocean Telegraph Company shall at all times give the United States free use of said cable, or cables, to a telegraphic operator of its own selection, to transmit any messages to and from its military, naval, and diplomatic or consular agents; and the said Company shall keep all its lines open to the public for the transmission for daily publication of market and commercial reports and intelligence, and all messages, despatches, and communications shall be forwarded in the order in which they shall be received; and the said Company shall not be permitted to charge and collect for messages transmitted through any of its submarine cables more than the rate of three dollars and fifty cents for messages of ten words, subject, however, to the power of Congress to alter and determine said rates; *Provided*, That the said International Ocean Telegraph Company shall, within the period of three years from the passage of this act, cause the said submarine telegraphic cable or cables to be laid down, and that the said cable or cables shall be in successful operation for the transmission of messages within the said period of five years; otherwise, this grant to be null and void.

SEC. 3. *And be it further enacted*, That Congress shall have power, at any time, to alter or repeal the foregoing act.

Approved May 5, 1866.

Official Note of the Minister of Her Catholic Majesty to  
the Minister Plenipotentiary of the United States of  
America.

(Translation from the original, on file in this Legation of the United States.)

LEGATION OF THE UNITED STATES }  
OF AMERICA, MADRID. }

MINISTERIAL DEPARTMENT OF STATE,  
Palace, *June 26, 1866.*

SIR: In reply to the note of that Legation, dated the 20th inst., relative to the petition which General Smith addressed to the Government of Her Majesty, I have the honor to transmit to your Excellency a copy of the Royal Order which the Minister of the Colonies has issued relating to this subject.

By it is granted, as your Excellency will see, to the said General Smith, as Representative of the International Ocean Telegraph Company, the permit which he solicited for this Company, to fix on the coasts of the island of Cuba one of the extremities of the Submarine Telegraphic Cable which will leave the United States at a point on the coast of Florida; it being understood that this concession is subject to the bases and conditions expressed in said Royal Order.

I avail myself of this occasion to renew to your Excellency the assurance of my most distinguished consideration.

(Signed) AN. BERMUDEZ DE CASTRO.

To the MINISTER Plenipotentiary  
*of the United States.*

I hereby certify that the foregoing is a true copy and translation from the original.

Attest.



(Signed) JOHN P. HALE,  
*U. S. Minister Plenipotentiary, &c., Madrid.*



[Translation.]

MINISTERIAL DEPARTMENT OF THE COLONIES.

The Minister of Colonies begs to communicate with this date to the Superior Civil Governor of the island of Cuba, the following, Major-General William F. Smith, of the United States Army, having repeatedly called on this ministry as the representative of the International Oceanic Telegraph Company, soliciting that the government of Her Catholic Majesty should authorize said Company to fix in that island the end of a Submarine Telegraph Cable, which will start from the United States at a point on the coast of Florida, to establish communication with the Central Telegraph Station of Havana. In regard to the basis of the enterprise and its economical conditions they will be established by common consent of himself and the delegates which will be named by the Government of Her Catholic Majesty, the expositor. The Spanish Government claims and reserves the right and full power of suspending the working of said telegraphic line or ordering the cable to be taken up if in the judgment of this Government circumstances should occur in which it might be deemed advisable to suspend telegraphic communications between Cuba and the United States.

Referring to the communication which, with date 8th inst, the Minister of State sent to this bureau, transcribing what was communicated to him with

date 3d, by the Minister Plenipotentiary of the United States at this court, which states that "the Secretary of State of his country informs him that the Congress of the Union passed a law, granting to the International Ocean Telegraph Company, legally incorporated in the United States, the exclusive right of laying submarine telegraph cables between the United States and Cuba;" that he is charged by his Government to solicit from that of Her Catholic Majesty the necessary permission in order to enable said Company to fix one of the ends of the cable on the coast of Cuba, to communicate with the Central Department of the Havana Telegraph, subject to the conditions and restrictions which the Government of Her Catholic Majesty may deem expedient to propose, and adding, Major-General William F. Smith, of the United States Army, is at the present moment in Madrid representing the interests of said Company, and that he recommends him, and has instructions to recommend him, to the good offices of the Government of Her Catholic Majesty. Taking into consideration that said Company proposes, in the event of obtaining the required concessions from the Government of Spain, to stretch the telegraph cable from Florida to Cuba, during the months of autumn of the present year, for which purpose they allege that they have made the necessary surveys from their coasts as far as the jurisdictional waters of Spain on the coast of Cuba, and that their contracts are prepared with the constructors of submarine cables; considering the benefits to be derived

from a telegraphic communication to the already vast commercial relations which have been developed between Cuba and the United States, with reciprocal benefits to both countries, and, what is not less noteworthy, the service which is now discussed will greatly enhance the rapidity of communications between the island of Cuba and this Capital once that the Transatlantic cable is laid and working, and which the Government of Her Catholic Majesty has well-grounded reasons to think will be declared neutral in its continuation through the United States.

The Queen (whom God preserve), in concurrence with the Council of Ministers, has seen fit to grant to Mr. William F. Smith, as representing the International Ocean Telegraph Company, permission to fix at the point which your Excellency may designate, on the coasts of that island, the end of the submarine cable, which, in accordance with the grant made to the same Company by the Congress of the Union, will start from the coast of Florida. For this purpose your Excellency will, in concurrence with the senior naval officer of that station, permit the survey of the coast, thus completing the surveys and soundings already carried out by the United States as far as pertains to her coast and to the high seas. Your Excellency will also make the necessary dispositions to connect said cable with the central telegraphic station of that capital, with the understanding that the line, after its connection, will continue to be worked exclusively by the national operators, and under the basis

which your Excellency, after hearing the respective heads of department, will formulate conveniently, and submit for the approval of Government, which reserves to itself the power to suspend, either directly or by the authority of your Excellency, the telegraphic communications between that island and the United States, and in no case will the Company to whom this concession is made have any claim for indemnity on said account. All expenses of surveys and laying the lines as far as the Central Telegraphic Station of that capital will be entirely on account of the Company to whom this grant is made.

The adjustment of international telegraphic tariffs which will govern the sending of official and private telegrams between both countries will be subject of agreement entered into at this court between the Spanish Government represented by the Director-General of Telegraphs, and Mr. William F. Smith, representing the International Ocean Telegraph Company.

It is understood that this grant is made provisionally until such time as all the points which form the subject of this communication are arranged, so as to formulate the necessary grant, without prejudice to the consequences which may arise from the Royal Decree of June 30, 1865, which conceded to Don Arturo Marcoartú and others, provisional authority to establish telegraphic communication between the Spanish West Indies and the coasts of the United States.



By Royal Order, communicated through said minister, which I now transmit to you for your information. God preserve you many years.

MADRID, *June* 19, 1866.

The Sub-Secretary,

FERNANDO VIDA.

To Mr. WILLIAM F. SMITH,

*Representative of the International Ocean Telegraph Company.*

---

The condition referring to the Royal Order of June 30th, 1865, not being satisfactory, the Company have been soliciting its withdrawal, and with the following results:

[Translation.]

MINISTERIAL DEPARTMENT OF THE COLONIES.

# ROYAL DECREE.

In the proceedings relating to the decree of the 30th of June, 1865, which decree, originating in a provisional concession for the laying of submarine cables between certain designated points, granted to Messrs. Arturo Marcoartú, the Marquises of Marianao and Manzanedo, the Count Esteban de Cañongo, Michael Chevalier, Ferdinand Lesseps, and Leopold, Werner, authorized certain surveys, soundings, and other works, which had to precede the examination of the terms on which the final execution of said modes of communication should be allowed and decreed:

In view of the fact that Messrs. the Marquis of Manzanedo, Ferdinand Lesseps, and Michael Chevalier, have denied that they formed part of the corporation which was the subject of the declarations contained in the decree referred to, and in consideration of the death of the Marquis of Marianao ;

In view of the report of a full assemblage of the Council of State, wherein are detailed their reasonings wherefore the declarations made in said decree should be without effect ;

In view of the petition presented by Mr. Arthur Marcoartú, who states that he is an associate of the West Indian and American Telegraph Company, in which petition he solicits a final concession for the laying of the cables ;

Considering that all the declarations of the Royal Decree of the 30th June, 1865, which were made in favor of an association dissolved by the death of one of its members and by the secession of others, cannot refer to one person or association ;

Considering that by said declarations no perfect or absolute title was granted, but only and solely an authority to proceed with certain surveys and soundings which should precede the examination of the terms of a final concession, the conditions of which remain entirely at the free will of the Government ;

Considering that the present petition of Don Arturo Marcoartú, inasmuch as it is a purely person alone, or representing the West India and American Tele-

graph, has no connection with the persons in whose favor was issued the decree of the 30th June, 1865, and can adduce no legitimate derivation from the pure and sole authorization of works which was conceded to them ;

Considering that of this authorization, after the time that has since transpired, no use has been made in the manner in which it was intended, and that from said authorization no right can be derived, nor any reason adduced, why, the Association to which the authority was conceded having failed, new persons should invoke said authorization in order to unite it to other and more recent petitions, which have been presented for a final concession for the laying of the cables ;

In view of what has been declared to me by the Minister of the Colonies, and on the concurrence with my Council of State,

I declare null and without effect all the articles of the decree of the 30th of June, 1865.

Given in Zaráuz, on the twenty-ninth day of August, in the year one thousand eight hundred and sixty-six.

Subscribed by the Royal Hand.

The Minister of the Colonies,

ALEJANDRO CASTRO.

[Translation.]

LEGATION OF THE  
UNITED STATES OF AMERICA, MADRID.

## MINISTERIAL DEPARTMENT OF THE COLONIES.

The Minister of the Colonies says, under this date, to the Superior Civil Governor of the island of Cuba, what follows, to wit. :

In consequence of the Royal Decree of this date, in which that of the 30th of June, 1865, is declared to be of no effect, and its dispositions are annulled under which Don Arturo Marcoartú and others were authorized to execute certain studies, soundings, and works relative to the establishment of telegraphic submarine cables from the island of Cuba to that of Porto Rico, and from these two points to the coasts of the United States, of the Isthmus of Panama, and of the Empire of Mexico, the Queen (whom God guard), with the advice and consent of the Council of Ministers, has been pleased to declare ratified purely and simply the provisions of the Royal Order of the 19th of last June, by which there was conceded provisionally to William F. Smith, gentleman, as representative of the International Ocean Telegraph Company, permission to fix at the point which your Excellency may designate on the coasts of that island, the extremity of the submarine telegraphic cable, which, in accordance with the grant conceded to the same Company by the Government of the United States, will leave the coasts of Florida; it being understood that the reservations which the Royal Order cited made in favor of the



effects of the aforesaid Royal Decree of June 30th, 1865, remain without object, since the latter have ceased in all their parts in consequence of the annulment of the same."

By Royal Order communicated by the Minister aforesaid, I transmit this to you for your knowledge. God guard you many years.

MADRID, *August 29th*, 1866.

The Sub-Secretary,

(Signed.)

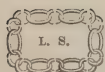
SALVADOR DE ALBACETE.

Addressed to WILLIAM F. SMITH, ESQ.,

*Representative of the International Ocean Telegraph Company.*

I hereby certify that the foregoing is a faithful translation from the Spanish of the original in my possession.

In testimony whereof witness my hand and the seal of this Legation of the United States at Madrid, August 30th, 1866.



(Signed.)

HORATIO J. PERRY,

*U. S. Secretary of Legation.*

The surveys and soundings between Florida and Cuba have been completed. The Report, with full maps, can be seen at the office of the Company.

*Extract from a letter dated Port Royal, May 14, 1866, from Mr. Henry Mitchell, Asst. U. S. Coast Survey, to Mr. J. E. Hilgard, in charge of Coast Survey.*

“Going southward from Sand Key Light, we find the bottom, beyond the rock apron, composed of whitish coral mud, until mid-channel is reached. Passing this point, we come upon a very stiff deposit of pale orange mud or sand; it is at once recognized as the debris of the moro-conglomerate. . . . The near approach of the soft bottom to the Cuba shores is likely to prove a great advantage to the telegraph, since the cable can only be worn off close in-shore, where convenient for recovery and repair. On the north side, the absence of currents over the rock apron, except near the reef, is favorable. There may be trouble at the seven-fathom reef, but this is close in, and bottom can be distinctly seen on quiet days. By many careful observations, I ascertained that objects can be seen at depth of ten fathoms, in calm weather, at midday. The lay of the cable on the bottom may be followed by the eye, beyond the action of the waves, therefore. . . . We have not found the ‘polar current,’ the ‘littoral counter-drifts,’ the ‘almost frigid substrata,’ and other fallacies. On the contrary, the little west-

wardly drift on the north side proves to be the flood current, and, of course, intermittent, while near the Moro there is a slack space of very small extent within the stream.

“The temperature is not less than  $60^{\circ}$  in the neighborhood of Cuba ; it has been stated in print at  $35^{\circ}$ . I shall report soon after reaching home, and trust you will feel, as we do, that no labor has been spared in this interesting work.”

*Extract from a letter dated Washington, June 29, 1866, from J. E. Hilgard, Esq., in charge U. S. Coast Survey Office, to Maturin L. Delafield, International Ocean Telegraph Co.*

“I note from a preliminary report by Mr. Mitchell, that his greatest depth is 845 fathoms just about midway between Sand Key and the Moro ; then gradually the depth shoals again to 380 fathoms. Going southward, further on, the bottom falls off again to 748 fathoms, and, shoaling gradually at first, rises 583 fathoms in the last four and one half miles, being on a slope of one in seven. This is the only difficult part of the line, but I scarcely consider it formidable. The ridge just south of mid-channel forms a respectable submarine mountain of twenty-eight hundred feet elevation, but with easy slopes.”

The following extract is published for the information of the public :

*Extract from Letter of Mr. Cromwell F. Varley, Electrician of the Atlantic Cable Company, to the "Observer," dated March 3, 1866.*

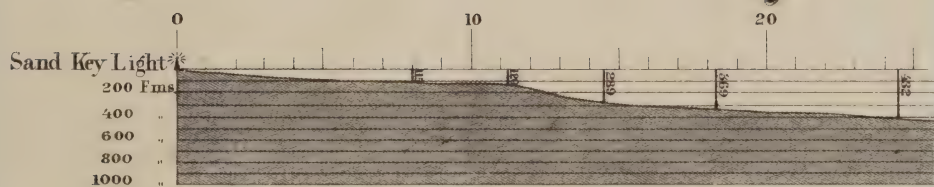
"The best preservative of gutta-percha is seawater. Failure of cables already laid prove no deterioration of the gutta-percha; it has proceeded from imperfect joints and imperfect manufacture. The Dover and Calais Cable, laid in 1851, is still doing its duty. These latter sources of failure are now entirely overcome, thanks to Samuel Statham, John Chatterton, Willoughby Smith, and those scientific gentlemen who have devised methods as well as apparatus for hunting out minute faults, even when they have been so small that they would not weaken the signals through the Atlantic Cable a one-millionth part.

"There is no instance of a deep-sea cable that was perfect when laid having failed in deep water. The Malta and Alexandria Line is laid in three sections, and the one laid in deep sea from Malta to Tripoli has never cost sixpence for repairs. The injuries have all been, with one exception, between Bengazi and Alexandria, where the cable is laid in shallow water, and where it has had to be repaired each time it has been chafed by the rocks. In the new Atlantic Cable, the shore ends will be carried suffi-

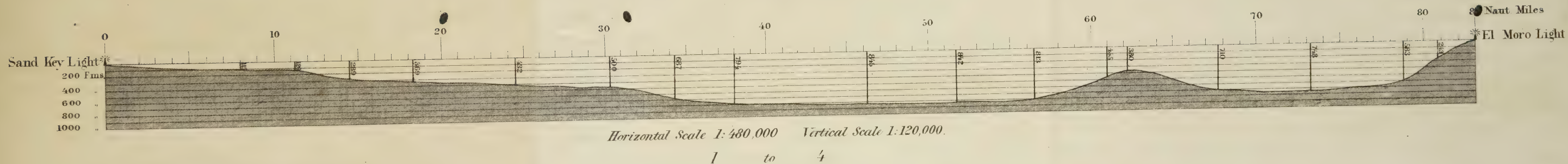


ciently far out to reach into deep water, and we have no instance on record of a cable approaching to the weight of this shore end having been injured. The lines once laid perfectly, will, in all probability, be permanent.





PROFILE MAP  
 showing bottom between the  
 • ISLAND OF CUBA AND FLORIDA KEYS, U.S.  
 FROM SURVEY BY MR HENRY MITCHELL,  
 U.S. Coast Survey.

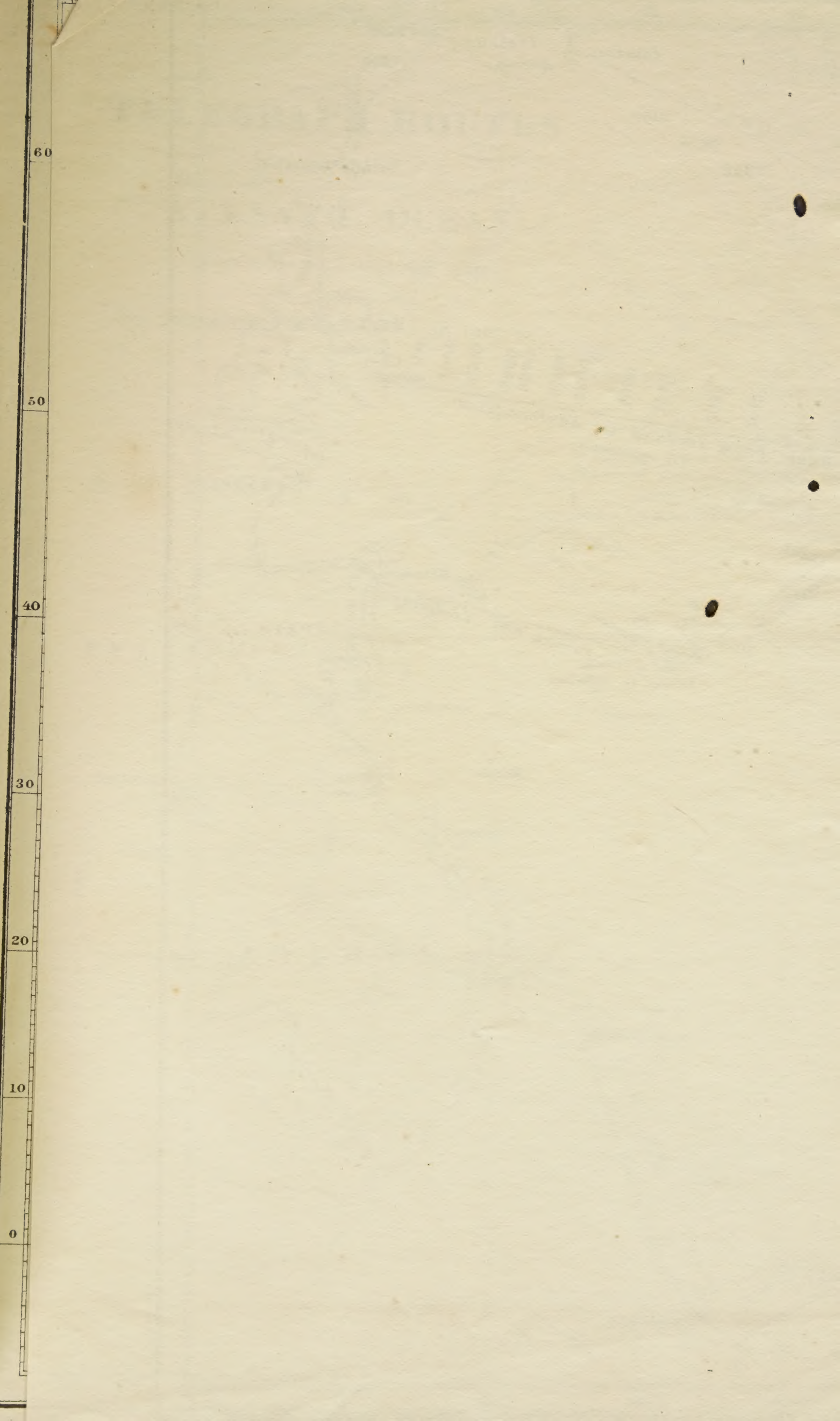












60

50

40

30

20

10

0



TELEGRAPH ROUTES  
crossing the

crossing the

ATLANTIC OCEAN.

From a French Telegraph Map.

The Soundings are expressed in metres.

Lith. of J. Bien, 24 Vesey St. N.Y.







459

